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- An acoustic horn comprising a tapered structure having a 25. base end and an apex end, the tapered structure being formed from a sheet of foldable material, and comprising a wall member having a plurality of fold lines defining the edges of a plurality of juxtaposed panels, characterised in that at least two of the fold lines are arcuate to form a first nonplanar panel bound by said arcuate fold lines, both the base end and the apex end being open.
 - An acoustic horn according to claim 25, wherein the structure further comprises an internal channel within the acoustic horn.
 - An acoustic horn according to claim 25, wherein the 27. tapered structure has a cross-sectional area which increases non-linearly with distance from the apex end.
- An acoustic horn as claimed in claim 25, wherein at least 20 two of the arcuate fold lines converge towards the apex end to contribute to a general convergence of the tapered structure.
- An acoustic horn as claimed in claim 25, wherein at least two of the arcuate fold lines converge towards the base end of 25 the structure such that the at least two arcuate fold lines converge to a point at or near the base end.
- An acoustic horn as claimed in claim 25, wherein the first 30. non-planar panel is outwardly concave and has mirror symmetry 30 about a longitudinal axial plane substantially perpendicular to the non-planar panel.
- 31. An acoustic horn as claimed in claim 25, wherein the wall member includes a second non-planar panel, opposed to the 35 first non-planar panel, which second non-planar panel is outwardly concave.

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- 32. An acoustic horn as claimed in claim 31, wherein the first and second non-planar panels are of different size from each other and one or both converge to a point proximate the base end.
- 33. An acoustic horn as claimed in claim 31, wherein fold lines are disposed in at least the first non-planar panel, thereby allowing the tapered structure to be folded flat.
- 34. An acoustic horn as claimed in claim 31, wherein the wall member includes two further opposing non-planar panels, joining the first and second non-planar panels, and being generally outwardly convex.
- 35. An acoustic horn as claimed in claim 31, wherein the first and second non-planar panels are generally elliptically shaped.
- 20 36. An acoustic horn as claimed in claim 31, wherein the first and second non-planar panels are generally petal-shaped.
- 37. An acoustic horn as claimed in claim 31, wherein the first and second non-planar panels are generally trapezoidal shaped with the non-parallel sides being arcuate.
 - 38. An acoustic horn as claimed in claim 26, wherein the internal channel is integrally formed with the tapered structure.
 - 39. An acoustic horn as claimed in claim 26, wherein the internal channel is formed by folding a portion of the sheet of foldable material.
- 35 40. An acoustic horn as claimed in claim 26, wherein at least one orifice or notch is formed in a wall of the internal channel to support a vibrating element.

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- An acoustic horn as claimed in claim 40, wherein the 41. vibrating element is formed from one of a thin paper, plastics and metal sheet for being forced into vibration when a user modulates a flow of air into the horn.
 - An acoustic horn as claimed in claim 41, wherein the one 42. of a thin paper, plastic and metal sheet is laminated with laminating material and the laminating material extends over the orifice or notch to form the vibrating element.
 - An acoustic horn as claimed in claim 25, wherein the 43. tapered structure generally comprises two flat planar portions being joined at opposed edges of a flat structure.
- An acoustic horn as claimed in claim 43, wherein a single line of adhesion is provided such that the two flat planar portions can be held together when formed from one or more sheets of foldable material.
 - An acoustic horn as claimed in claim 43, wherein the line 45. of adhesion is a straight line.
- An acoustic horn as claimed in claim 44, wherein the line of adhesion is located along an edge of the flat structure. 25
 - An acoustic horn as claimed in claim 25, wherein the tapered structure comprises at least first, second and third wall portions, wherein the wall portions co-operate in use, to form a channel, and wherein the second portion, intermediate the first and third portion, is bounded by two arcuate curves, and has an outwardly concave surface.
- A blank of foldable sheet material which has fold lines whereby the blank can be folded to the acoustic horn of claim 25.

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Respectfully submitted,

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